TRIDONIC

BLA SNC3

BLA essence

BLA 600x600mm 3800lm SNC3

BLA 1200x300mm 3800lm SNC3

BLA 1200x600mm 7000lm SNC3

Product description

_ Backlit panel for direct recessed mount
_ For suspended ceiling grid measure of 600 mm, 1,200 x 300 mm and 1,200 x 600 mm
_ IK rating IK03
_ Free choice of variable dimming and non-dimming LED drivers
_ Pre-wired for quick and easy installation
_ Long lifetime: L70B50 >54,000 h
_ 5 years guarantee (conditions at https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions)

Optical properties

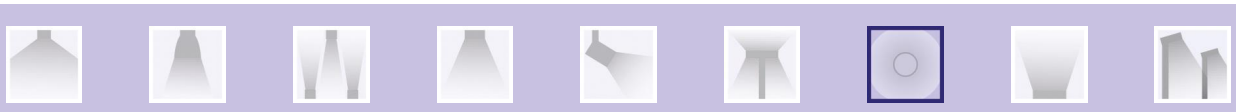
_ Colour temperatures 3,000, 4,000 and 6,500 K
_ Efficacy up to 137 lm/W
_ Colour rendering index CRI > 80
_ Small colour tolerance (MacAdam 5)

Mechanical properties

_ Luminaire dimension 600 x 600 mm, 1,200 x 300 mm and 1,200 x 600 mm

Website

http://www.tridonic.com/28005400



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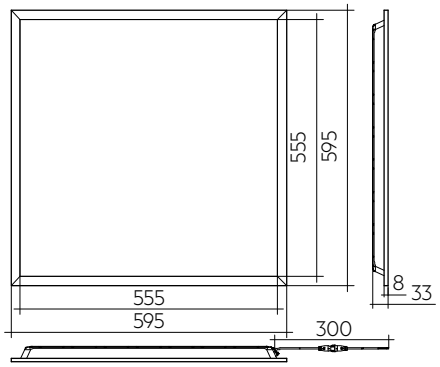
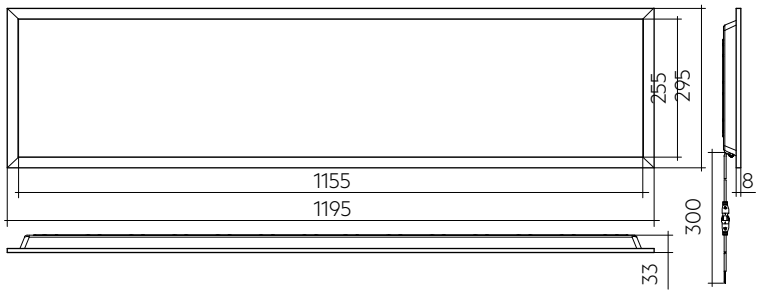
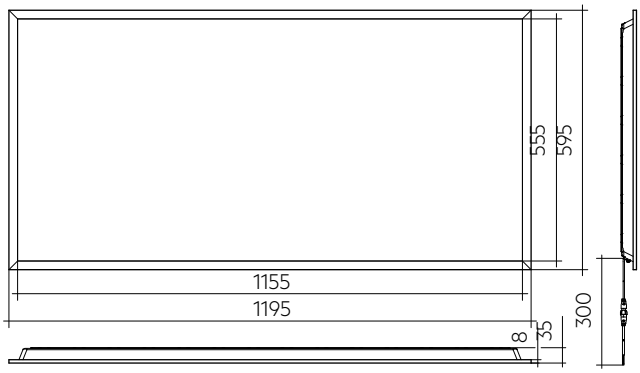


BLA 600x600mm 3800lm SNC3



BLA 1200x300mm 3800lm SNC3



BLA 1200x600mm 7000lm SNC3

Ordering data

Type	Article number	Packaging	Weight per pc.
BLA 600x600mm 3800lm 830 SNC3	**28005400**	6 pc(s).	1.3 kg
BLA 600x600mm 3800lm 840 SNC3	**28005401**	6 pc(s).	1.3 kg
BLA 600x600mm 3800lm 865 SNC3	**28005402**	6 pc(s).	1.3 kg
BLA 1200x300mm 3800lm 830 SNC3	**28005403**	6 pc(s).	1.4 kg
BLA 1200x300mm 3800lm 840 SNC3	**28005404**	5 pc(s).	1.4 kg
BLA 1200x300mm 3800lm 865 SNC3	**28005405**	6 pc(s).	1.4 kg
BLA 1200x600mm 7000lm 830 SNC3	**28005406**	5 pc(s).	3.2 kg
BLA 1200x600mm 7000lm 840 SNC3	**28005407**	5 pc(s).	3.2 kg
BLA 1200x600mm 7000lm 865 SNC3	**28005408**	6 pc(s).	3.2 kg

Technical data

Ambient temperature ta	-20 ... +40 °C
Irated for 3,800 lm	800 mA
Irated for 7,000 lm	1,500 mA
Imax for 3,800 lm	990 mA
Imax for 7,000 lm	1,760 mA
Max. permissible LF current ripple for 3,800 lm	1,250 mA
Max. permissible LF current ripple for 7,000 lm	2,500 mA
Max. permissible peak current for 3,800 lm	1,400 mA / max. 10 ms
Max. permissible peak current for 7,000 lm	2,800 mA / max. 10 ms
Colour tolerance ①	5 SDCM
Max. working voltage for insulation SELV	60 V
Insulation test voltage	0.5 kV
Protection class	III
Risk group (IEC 62471)	RG0
Type of protection	IP20
Lumen maintenance L70B50	54,000 h
Guarantee (conditions at www.tridonic.com)	5 Year(s)

Approval marks

RoHS

Standards

EN 62471, EN 61547, EN 55015, EN 60598-1, EN 60598-2-2, EN 61000-3-2, EN 61000-3-3

Specific technical data

Type	Article number	Colour temperature	Typ. luminous flux at ta = 25 °C②	Forward current	Min. forward voltage at ta = 25 °C	Typ. forward voltage at ta = 25 °C	Max. forward voltage at ta = 25 °C	Typ. power consumption at ta = 25 °C③	Efficacy of the luminaire at ta = 25 °C	Beam characterist	Colour rendering index CRI
Operating mode HE											
BLA 600x600mm 3800lm 830 SNC3	**28005400**	3,000 K	2,900 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	121 lm/W	110°	>80
BLA 600x600mm 3800lm 840 SNC3	**28005401**	4,000 K	3,120 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	128 lm/W	110°	>80
BLA 600x600mm 3800lm 865 SNC3	**28005402**	6,500 K	3,120 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	130 lm/W	110°	>80
BLA 1200x300mm 3800lm 830 SNC3	**28005403**	3,000 K	2,830 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	118 lm/W	110°	>80
BLA 1200x300mm 3800lm 840 SNC3	**28005404**	4,000 K	3,050 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	127 lm/W	110°	>80
BLA 1200x300mm 3800lm 865 SNC3	**28005405**	6,500 K	3,050 lm	700 mA	30.8 V	34.2 V	37.6 V	24.0 W	127 lm/W	110°	>80
BLA 1200x600mm 7000lm 830 SNC3	**28005406**	3,000 K	5,800 lm	1,400 mA	30.8 V	34.2 V	37.6 V	48.0 W	121 lm/W	110°	>80
BLA 1200x600mm 7000lm 840 SNC3	**28005407**	4,000 K	6,240 lm	1,400 mA	30.8 V	34.2 V	37.6 V	48.0 W	130 lm/W	110°	>80
BLA 1200x600mm 7000lm 865 SNC3	**28005408**	6,500 K	6,240 lm	1,400 mA	30.8 V	34.2 V	37.6 V	48.0 W	130 lm/W	110°	>80
Operating mode NM											
BLA 600x600mm 3800lm 830 SNC3	**28005400**	3,000 K	3,250 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	117 lm/W	110°	>80
BLA 600x600mm 3800lm 840 SNC3	**28005401**	4,000 K	3,500 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	126 lm/W	110°	>80
BLA 600x600mm 3800lm 865 SNC3	**28005402**	6,500 K	3,500 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	126 lm/W	110°	>80
BLA 1200x300mm 3800lm 830 SNC3	**28005403**	3,000 K	3,170 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	114 lm/W	110°	>80
BLA 1200x300mm 3800lm 840 SNC3	**28005404**	4,000 K	3,420 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	123 lm/W	110°	>80
BLA 1200x300mm 3800lm 865 SNC3	**28005405**	6,500 K	3,420 lm	800 mA	31.3 V	34.8 V	38.3 V	27.8 W	123 lm/W	110°	>80
BLA 1200x600mm 7000lm 830 SNC3	**28005406**	3,000 K	6,150 lm	1,500 mA	31.1 V	34.5 V	38.0 V	51.8 W	119 lm/W	110°	>80
BLA 1200x600mm 7000lm 840 SNC3	**28005407**	4,000 K	6,620 lm	1,500 mA	31.1 V	34.5 V	38.0 V	51.8 W	128 lm/W	110°	>80
BLA 1200x600mm 7000lm 865 SNC3	**28005408**	6,500 K	6,620 lm	1,500 mA	31.1 V	34.5 V	38.0 V	51.8 W	128 lm/W	110°	>80
Operating mode HO											
BLA 600x600mm 3800lm 830 SNC3	**28005400**	3,000 K	3,600 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	113 lm/W	110°	>80
BLA 600x600mm 3800lm 840 SNC3	**28005401**	4,000 K	3,900 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	122 lm/W	110°	>80
BLA 600x600mm 3800lm 865 SNC3	**28005402**	6,500 K	3,900 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	122 lm/W	110°	>80
BLA 1200x300mm 3800lm 830 SNC3	**28005403**	3,000 K	3,500 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	110 lm/W	110°	>80
BLA 1200x300mm 3800lm 840 SNC3	**28005404**	4,000 K	3,800 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	119 lm/W	110°	>80
BLA 1200x300mm 3800lm 865 SNC3	**28005405**	6,500 K	3,800 lm	900 mA	32.0 V	35.6 V	39.2 V	32.0 W	119 lm/W	110°	>80
BLA 1200x600mm 7000lm 830 SNC3	**28005406**	3,000 K	6,500 lm	1,600 mA	31.3 V	34.8 V	38.3 V	55.6 W	117 lm/W	110°	>80
BLA 1200x600mm 7000lm 840 SNC3	**28005407**	4,000 K	7,000 lm	1,600 mA	31.3 V	34.8 V	38.3 V	55.6 W	126 lm/W	110°	>80
BLA 1200x600mm 7000lm 865 SNC3	**28005408**	6,500 K	7,000 lm	1,600 mA	31.3 V	34.8 V	38.3 V	55.6 W	126 lm/W	110°	>80

① Central measurement over the whole module.
② Tolerance of typ. luminous flux ± 7.5 %. Measurement uncertainty ± 10 %.
③ Tolerance of power consumption 10 %. Measurement uncertainty 1 %.

1. Standards

EN 62471
EN 61547
EN 55015
EN 60598-1
EN 60598-2-2
EN 61000-3-2
EN 61000-3-3

1.1 Risk group

Type	Risk group (IEC 62471)
BLA SNC3	RG0

1.2 Energy classification

Type	Article number	These products contain a light source of energy efficiency class
BLA 600x600mm 3800lm 830 SNC3	28005400	D
BLA 600x600mm 3800lm 840 SNC3	28005401	D
BLA 600x600mm 3800lm 865 SNC3	28005402	D
BLA 1200x300mm 3800lm 830 SNC3	28005403	E
BLA 1200x300mm 3800lm 840 SNC3	28005404	D
BLA 1200x300mm 3800lm 865 SNC3	28005405	D
BLA 1200x600mm 7000lm 830 SNC3	28005406	E
BLA 1200x600mm 7000lm 840 SNC3	28005407	D
BLA 1200x600mm 7000lm 865 SNC3	28005408	D

2. Thermal details

2.1 ambient temperature and lifetime

Operation within the specified ambient temperature range is crucial for the light output and lifetime of a LED product. Within the specified ambient temperature range, a maximum casing temperature of 90 °C is not exceeded.
The LED product is intended to be used in downward operating position, for details see 3.4 Mounting instructions.

2.2 Storage and humidity

storage temperature	-20 ... +50 °C

Operation only in non condensing environment, at a humidity < 70 %.

3. Installation / wiring

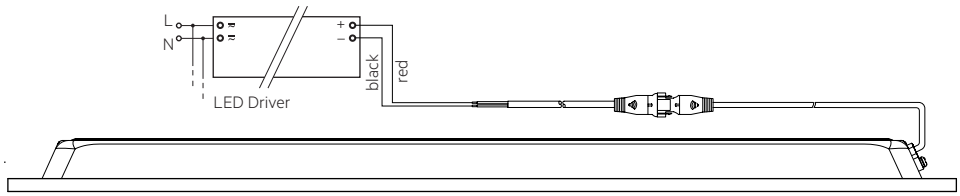
3.1 Electrical supply/choice of LED driver

BLA modules from Tridonic are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a LED driver which complies with the relevant standards. The use of LED drivers from Tridonic in combination with BLA modules guarantees the necessary protection for safe and reliable operation.

If a LED driver other than Tridonic is used, it must provide the following protection:
- Short-circuit protection
- Overload protection
- Overtemperature protection

BLA DC have to be operated with a SELV LED driver.
BLA modules must be supplied by a constant current LED driver.
Operation with a constant voltage LED driver will lead to an irreversible damage of the module.
Wrong polarity can damage the BLA.

3.2 wiring



3.3 Wiring type and cross section

Cable type: AWG22x2C
Cable length: 300 mm
Stripping length: 9 mm

3.4 Mounting instruction

None of the components of the BLA (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses.
Recessed mounting for suspended ceilings with grid measure of 600 mm, 1200 x 300 or 1200 x 600 mm. For more details see mounting instructions.
To prevent fingerprints we recommend to mount the BLA only with gloves.

Chemical substance may harm the LED module. Chemical reactions could lead to colour shift, reduced luminous flux or a total failure of the module caused by corrosion of electrical connections.

3.5 EOS/ESD safety guidelines

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice.
For further information for EOS/ESD safety guidlines and the ESD classification please refer to the brochure entitled http://www.tridonic.com/esd-protection.

4. Lifetime

4.1 Lifetime, lumen maintenance and failure rate

The light output of an LED module decreases over the lifetime, this is characterized with the L value.
L70 means that the LED module will give 70 % of its initial luminous flux.
This value is always related to the number of operation hours and therefore defines the lifetime of an LED module.

As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules.
The B value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value.
In addition the percentage of failed modules (fatal failure) is characterized by the C value.

4.2 Lumen maintenance

BLA 600x600mm SNC3, BLA 1200x300mm SNC3

Supply current	ta	L90B10	L90B50	L80B10	L80B50	L70B10	L70B50
700 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h
800 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h
900 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h

BLA 1200x600mm SNC3

Supply current	ta	L90B10	L90B50	L80B10	L80B50	L70B10	L70B50
1,400 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h
1,500 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h
1,600 mA	25 °C	45k h	50k h	>54k h	>54k h	>54k h	>54k h
	40 °C	43k h	48k h	>54k h	>54k h	>54k h	>54k h

L0C10 >54k h. At ta = 25 °C, based on 10 swichting cycles per day.

4.3 Switching capability

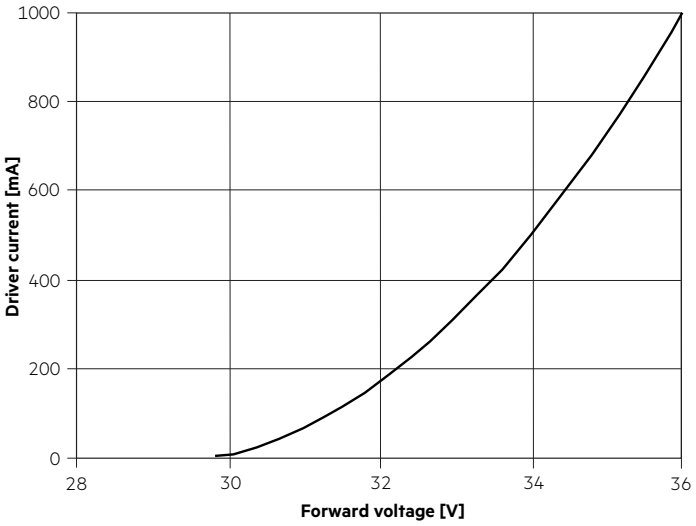
50,000 cycles

10 s on / 10 s off at Irated

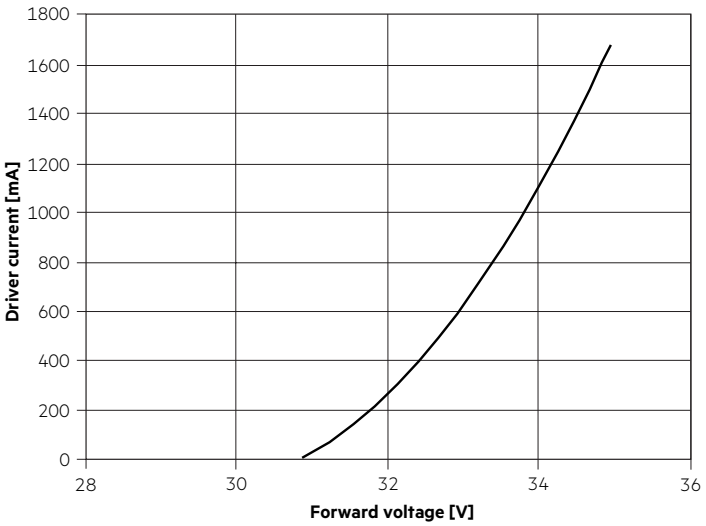
5. Electrical values

5.1 Typ. forward voltage vs. forward current

BLA 600x600mm SNC3, BLA 1200x300mm SNC3



BLA 1200x600mm SNC3



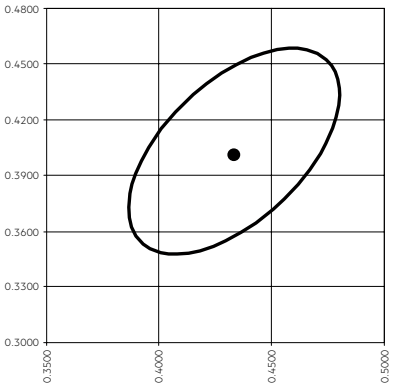
6. Photometric characteristics

6.1 Coordinates and tolerances according to CIE 1931

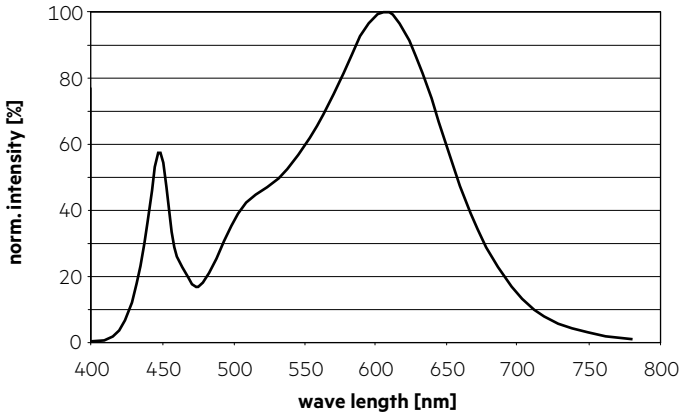
The specified colour coordinates are central measured in thermal saturated stage.
The ambient temperature of the measurement is ta = 25 °C.
The measurement tolerance of the colour coordinates are ± 0.01.

3,000 K

	x0	y0
Centre	0.4338	0.4030

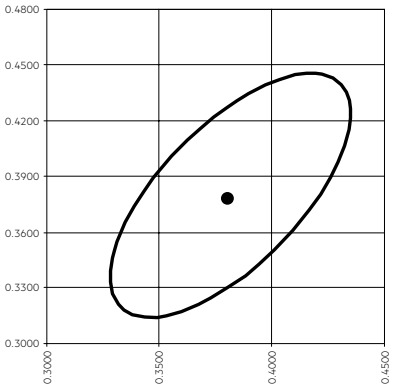


MacAdam ellipse: 5SDCM

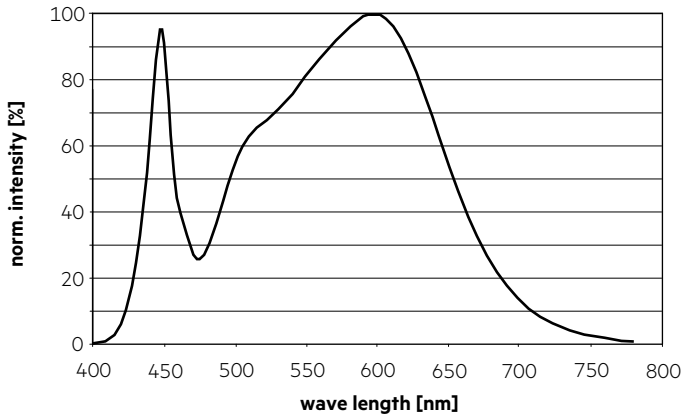


4,000 K

	x0	y0
Centre	0.3818	0.3797

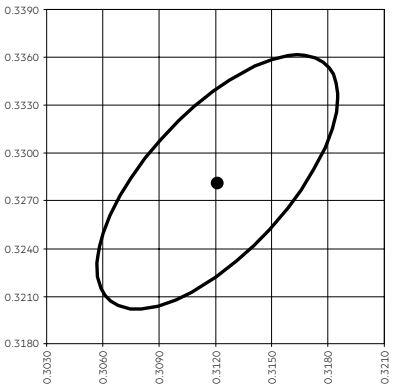


MacAdam ellipse: 5SDCM

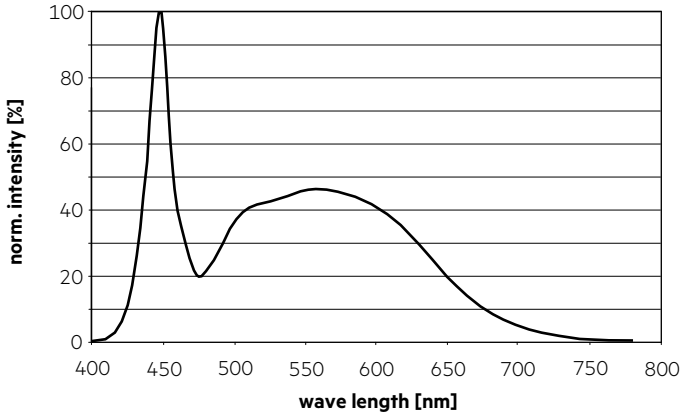


6,500 K

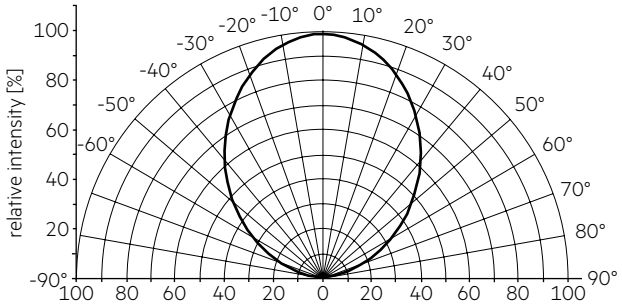
	x0	y0
Centre	0.3123	0.3282



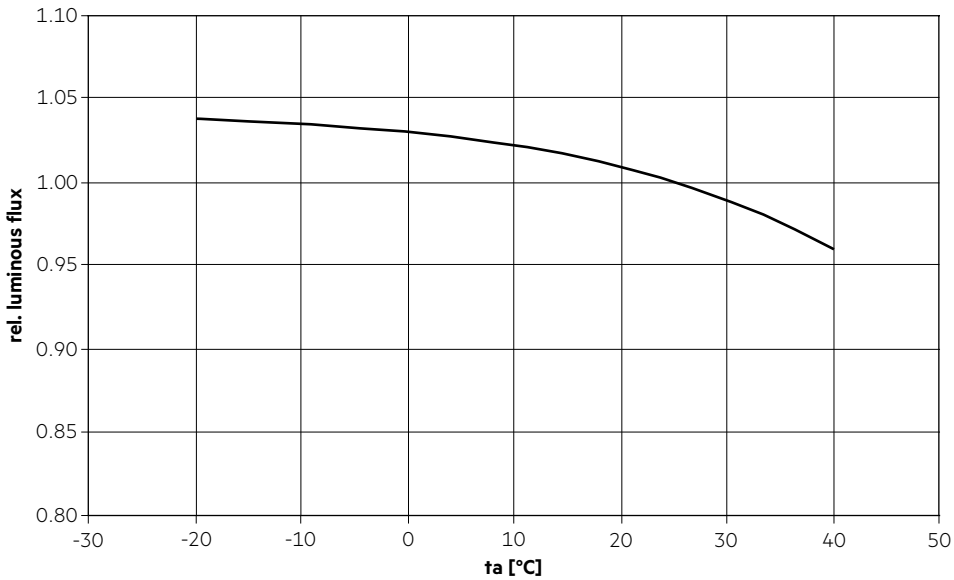
MacAdam ellipse: 5SDCM



6.2 Light distribution

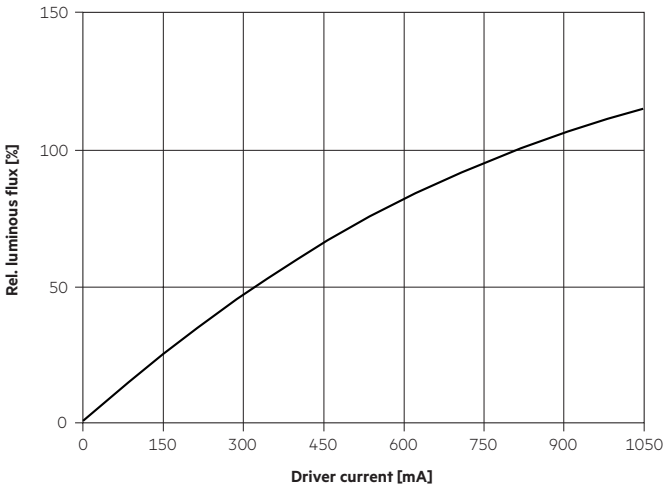


6.3 Relative luminous flux vs. tp temperature

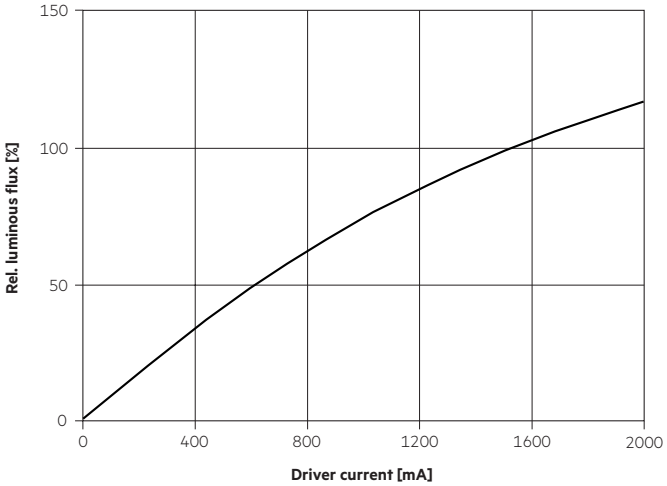


6.4 Relative luminous flux vs. operating current

BLA 600x600mm SNC3, BLA 1200x300mm SNC3



BLA 1200x600mm SNC3



7. Miscellaneous

7.1 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.